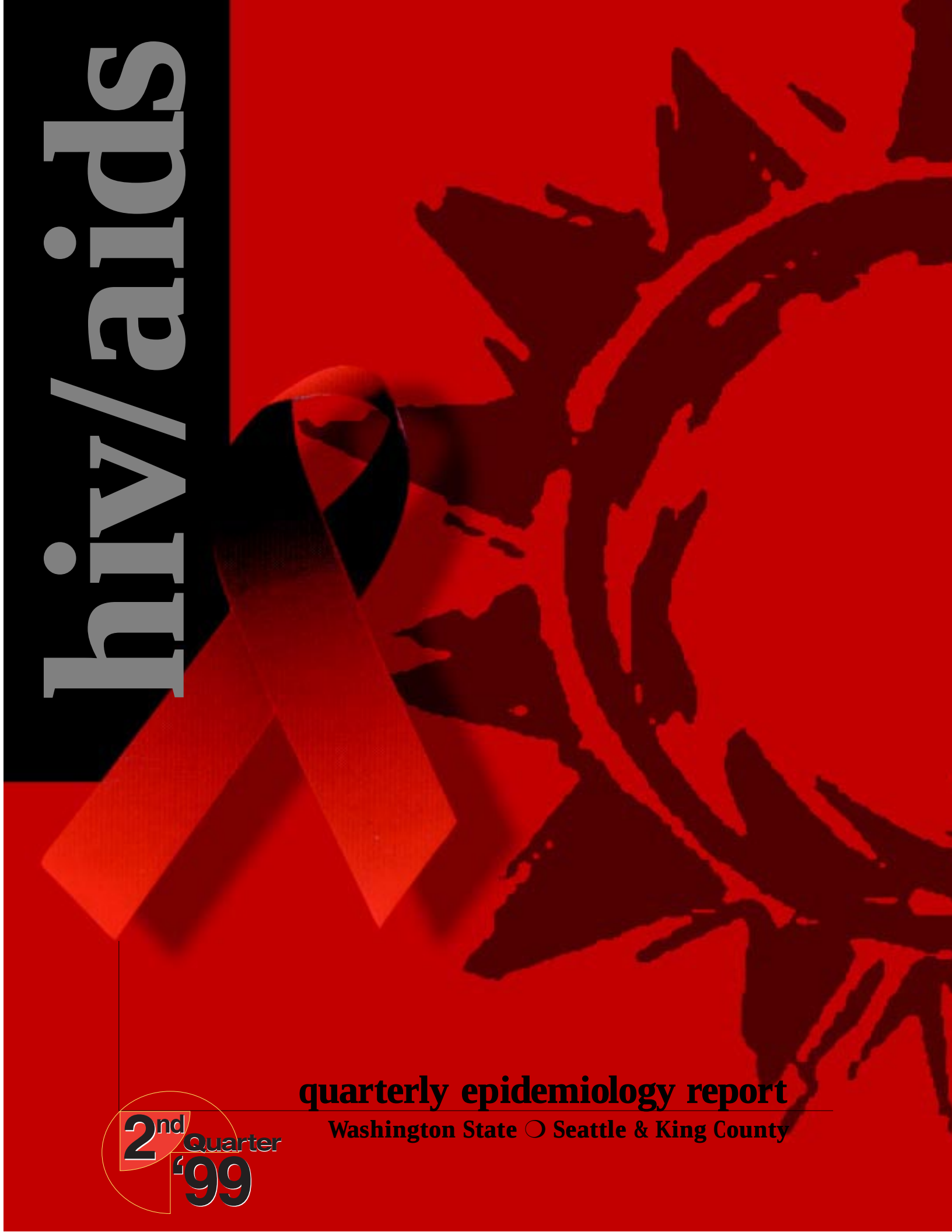
hiv/aids



quarterly epidemiology report

Washington State ❍ Seattle & King County

2nd Quarter '99

Washington State/Seattle-King County HIV/AIDS Epidemiology Report

Summary Tables

HIV/AIDS Epidemiology and Surveillance News

To be included on the mailing list or to request address corrections, write to the PH-SKC HIV/AIDS Epidemiology Program or phone (206)296-4645, or email steve.hitchcock@metrokc.gov. We provide alternative formats for printed material upon request for people with special needs.

Credits

This is the fifty-third edition of a quarterly report on the epidemiology of HIV and AIDS. Produced as a joint project by Public Health-Seattle and King County and the Washington State Department of Health's HIV/AIDS epidemiology programs, it is funded in part by a Centers for Disease Control and Prevention cooperative agreement for HIV/AIDS surveillance. We wish to thank the health care providers caring for people with HIV/AIDS and the clinics and patients participating in epidemiologic studies. Their cooperation with the public health departments' HIV/AIDS control efforts provides the basis for the data presented in this report. We also wish to acknowledge the outstanding assistance of our staff including Stephen Hitchcock, Jennifer Davis, Linda Oakley and Rusty Myers at Public Health-Seattle King County, and Donna Compton, Mark Charonis, Anna Easton and Laraine Shann at the Washington State Infectious Disease and Reproductive Health Assessment Unit.

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1993 Expanded AIDS Surveillance Case Definition for Adults and Adolescents

HIV infection and:

- Candidiasis of bronchi, trachea, or lungs
- Candidiasis, esophageal
- CD4+ T-lymphocyte counts <200/mL or percent <14
- Cervical cancer, invasive
- Coccidioidomycosis, disseminated or extrapulmonary
- Cryptococcosis, extrapulmonary
- Cryptosporidiosis, chronic intestinal (>1 month duration)
- Cytomegalovirus disease (other than liver, spleen, or nodes)
- Cytomegalovirus retinitis (with loss of vision)
- Encephalopathy, HIV-related
- Herpes simplex: chronic ulcer(s) (>1 month duration) or bronchitis, pneumonitis, or esophagitis
- Histoplasmosis, disseminated or extrapulmonary
- Isosporiasis, chronic intestinal (>1 month duration)
- Kaposi's sarcoma
- Lymphoma, Burkitt's (or equivalent term)
- Lymphoma, immunoblastic (or equivalent term)
- Lymphoma, primary in brain
- *Mycobacterium avium* complex or *M. kansasii*, disseminated or extrapulmonary
- *Mycobacterium tuberculosis*, any site (pulmonary or extrapulmonary)
- *Pneumocystis carinii* pneumonia
- Pneumonia, recurrent
- Progressive multifocal leukoencephalopathy
- *Salmonella* septicemia, recurrent
- Toxoplasmosis of brain
- Wasting syndrome due to HIV

To report HIV/AIDS cases, or to order reporting cards and information, call Linda Oakley or Rusty Myers at (206) 296-4645 (King County) or Mark Charonis at (360) 236-3419 (Washington State outside King County).

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Table 1. Surveillance summary of reported AIDS[1] cases, deaths, and persons living with AIDS - King County, other WA counties, all WA State, U.S.

		ADULT/ ADOLESCENT	PEDIATRIC[2]	TOTAL
KING COUNTY	*Cases reported as of 6/30/99*			
	New cases reported this quarter	54	0	54
	New cases reported year-to-date	108	0	108
	Cumulative cases	5,730	14	5,744
	Cumulative deaths	3,442	8	3,450
	Persons living[3]	2,288	6	2,294
OTHER COUNTIES	*Cases reported as of 6/30/99*			
	New cases reported this quarter	29	0	29
	New cases reported year-to-date	70	0	70
	Cumulative cases	3,004	17	3,021
	Cumulative deaths	1,668	10	1,678
	Persons living[3]	1,336	7	1,343
WA STATE	*Cases reported as of 6/30/99*			
	New cases reported this quarter	83	0	83
	New cases reported year-to-date	178	0	178
	Cumulative cases	8,734	31	8,765
	Cumulative deaths	5,110	18	5,128
	Persons living[3]	3,624	13	3,637
U.S.	*Cases reported as of 12/31/98[4]*			
	Cumulative cases	679,739	8,461	688,200
	Cumulative deaths	408,624	4,952	413,576
	Persons living[3]	271,115	3,509	274,624

[1]AIDS by 1993 surveillance case definition
[2]Age < 13 years at time of AIDS diagnosis
[3]Persons reported with AIDS and not known to have died
[4]Most recent date that complete U.S. statistics are available

Table 2. Cumulative AIDS case counts and deaths by resident county and AIDSNet region at diagnosis - Reported as of 6/30/99 - WA State

		TOTAL CASES		DEATHS		PRESUMED LIVING	
		No.	(%)[1]	No.	(%)[2]	No.	(%)[2]
Region 1:	Adams	3	(0.0)	0	(0)	3	(100)
	Asotin	13	(0.1)	6	(46)	7	(54)
	Columbia	3	(0.0)	2	(67)	1	(33)
	Ferry	5	(0.1)	3	(60)	2	(40)
	Garfield	0	(0.0)	0	(0)	0	(0)
	Lincoln	2	(0.0)	2	(100)	0	(0)
	Okanogan	17	(0.2)	6	(35)	11	(65)
	Pend Oreille	8	(0.1)	4	(50)	4	(50)
	Spokane	342	(3.9)	201	(59)	141	(41)
	Stevens	14	(0.2)	6	(43)	8	(57)
	Walla Walla	47	(0.5)	24	(51)	23	(49)
	Whitman	7	(0.1)	4	(57)	3	(43)
	SUBTOTAL	**461**	**(5.3)**	**258**	**(56)**	**203**	**(44)**
Region 2:	Benton	59	(0.7)	28	(47)	31	(53)
	Chelan	30	(0.3)	19	(63)	11	(37)
	Douglas	2	(0.0)	2	(100)	0	(0)
	Franklin	17	(0.2)	8	(47)	9	(53)
	Grant	24	(0.3)	18	(75)	6	(25)
	Kittitas	13	(0.1)	7	(54)	6	(46)
	Yakima	117	(1.3)	59	(50)	58	(50)
	SUBTOTAL	**262**	**(3.0)**	**141**	**(54)**	**121**	**(46)**
Region 3:	Island	50	(0.6)	32	(64)	18	(36)
	San Juan	14	(0.2)	9	(64)	5	(36)
	Skagit	42	(0.5)	27	(64)	15	(36)
	Snohomish	452	(5.2)	252	(56)	200	(44)
	Whatcom	125	(1.4)	63	(50)	62	(50)
	SUBTOTAL	**683**	**(7.8)**	**383**	**(56)**	**300**	**(44)**
Region 4:	King	5,744	(65.5)	3450	(60)	2294	(40)
Region 5:	Kitsap	150	(1.7)	94	(63)	56	(37)
	Pierce	754	(8.6)	421	(56)	333	(44)
	SUBTOTAL	**904**	**(10.3)**	**515**	**(57)**	**389**	**(43)**
Region 6:	Clallam	39	(0.4)	18	(46)	21	(54)
	Clark	301	(3.4)	171	(57)	130	(43)
	Cowlitz	74	(0.8)	40	(54)	34	(46)
	Grays Harbor	37	(0.4)	20	(54)	17	(46)
	Jefferson	21	(0.2)	11	(52)	10	(48)
	Klickitat	10	(0.1)	8	(80)	2	(20)
	Lewis	33	(0.4)	23	(70)	10	(30)
	Mason	54	(0.6)	13	(24)	41	(76)
	Pacific	11	(0.1)	8	(73)	3	(27)
	Skamania	7	(0.1)	5	(71)	2	(29)
	Thurston	123	(1.4)	64	(52)	59	(48)
	Wahkiakum	1	(0.0)	0	(0)	1	(100)
	SUBTOTAL	**711**	**(8.1)**	**381**	**(54)**	**330**	**(46)**
TOTAL		**8,765**	**(100.0)**	**5,128**	**(59)**	**3,637**	**(41)**

[1] Percent of Washington State cases (column %)
[2] Percent of individual county's cases (row %)

Table 3. Demographic characteristics of cumulative reported AIDS[1] cases - King County, other WA counties, all WA State, U.S.

	KING COUNTY		OTHER COUNTIES		ALL WA STATE		TOTAL U.S.	
Cases reported as of:	6/30/99		6/30/99		6/30/99		12/31/98[2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
SEX								
Male	5,491	(96)	2,658	(88)	8,149	(93)	574,783	(84)
Female	253	(4)	363	(12)	616	(7)	113,414	(16)
AGE GROUP (YRS)								
< 13	14	(<1)	17	(1)	31	(<1)	8,461	(1)
13-19	10	(<1)	22	(1)	32	(<1)	3,423	(<1)
20-29	980	(17)	614	(20)	1,594	(18)	117,717	(17)
30-39	2,809	(49)	1,338	(44)	4,147	(47)	310,196	(45)
40-49	1,425	(25)	718	(24)	2,143	(24)	176,239	(26)
50-59	403	(7)	210	(7)	613	(7)	52,437	(8)
> 59	103	(2)	102	(3)	205	(2)	19,724	(3)
RACE/ETHNICITY								
White, not Hispanic	4,647	(81)	2,437	(81)	7,084	(81)	304,094	(44)
Black, not Hispanic	573	(10)	259	(9)	832	(9)	251,408	(37)
Hispanic	330	(6)	217	(7)	547	(6)	103,023	(18)
Asian/Pacific Islander	111	(2)	40	(1)	151	(2)	4,974	(1)
American Indian/AK Native	83	(1)	68	(2)	151	(2)	1,940	(<1)
Unknown	0	(0)	0	(0)	0	(0)	943	(<1)
HIV EXPOSURE CATEGORY								
Male-male sex	4,375	(76)	1,710	(57)	6,085	(69)	326,051	(47)
Injection drug use (IDU)	313	(5)	443	(15)	756	(9)	173,693	(25)
IDU & male-male sex	584	(10)	297	(10)	881	(10)	43,640	(6)
Heterosexual contact	178	(3)	259	(9)	437	(5)	66,490	(10)
Hemophilia	29	(1)	54	(2)	83	(1)	5,145	(1)
Transfusion	51	(1)	64	(2)	115	(1)	8,760	(1)
Mother at risk/has HIV	13	(<1)	14	(<1)	27	(<1)	7,687	(1)
Undetermined/other[3]	201	(3)	180	(6)	381	(4)	56,734	(8)
TOTAL CASES	**5,744**		**3,021**		**8,765**		**688,200**	

[1] AIDS by 1993 surveillance case definition
[2] Most recent date that complete U.S. statistics are available
[3] Includes patients for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), patients still under investigation, patients whose only risk was heterosexual contact where the risk of the sexual partner was undetermined, persons exposed to HIV through their occupation, and patients whose mode of exposure remains undetermined

Table 4A. Cumulative AIDS[1] cases by gender, race/ethnicity, and HIV exposure category - Reported as of 6/30/99 - King County

EXPOSURE CATEGORY	WHITE[2] No.	(%)	BLACK[2] No.	(%)	HISPANIC No.	(%)	ASIAN/PI[3] No.	(%)	AI/AN[4] No.	(%)	TOTAL No.	(%)
MALE												
Male-male sex	3,725	(83)	293	(59)	231	(73)	86	(83)	40	(56)	4,375	(80)
Injection drug use (IDU)	127	(3)	72	(14)	30	(9)	3	(3)	7	(10)	239	(4)
IDU & male-male sex	484	(11)	51	(10)	26	(8)	4	(4)	19	(27)	584	(11)
Heterosexual contact	26	(1)	20	(4)	8	(3)	1	(1)	1	(1)	56	(1)
Hemophilia	27	(1)	1	(<1)	0	(0)	1	(1)	0	(0)	29	(1)
Transfusion	27	(1)	2	(<1)	2	(1)	1	(1)	1	(1)	33	(1)
Mother at risk/has HIV	3	(<1)	3	(1)	0	(0)	0	(0)	0	(0)	6	(<1)
Undetermined/other	82	(2)	57	(11)	20	(6)	7	(7)	3	(4)	169	(3)
MALE SUBTOTAL (row %)	**4,501**	**(82)**	**499**	**(9)**	**317**	**(6)**	**103**	**(2)**	**71**	**(1)**	**5,491**	**(100)**
FEMALE												
Injection drug use (IDU)	38	(26)	27	(36)	1	(8)	0	(0)	8	(67)	74	(29)
Heterosexual contact	77	(53)	30	(41)	9	(69)	3	(38)	3	(25)	122	(48)
Hemophilia	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)	0	(0)
Transfusion	13	(9)	3	(4)	1	(8)	1	(13)	0	(0)	18	(7)
Mother at risk/has HIV	3	(2)	2	(3)	2	(15)	0	(0)	0	(0)	7	(3)
Undetermined/other	15	(10)	12	(16)	0	(0)	4	(50)	1	(8)	32	(13)
FEMALE SUBTOTAL (row %)	**146**	**(58)**	**74**	**(29)**	**13**	**(5)**	**8**	**(3)**	**12**	**(5)**	**253**	**(100)**
TOTAL	**4,647**	**(81)**	**573**	**(10)**	**330**	**(6)**	**111**	**(2)**	**83**	**(1)**	**5,744**	**(100)**

Table 4B. Cumulative AIDS[1] cases by gender, race/ethnicity, and HIV exposure category - Reported as of 6/30/99 - WA State

EXPOSURE CATEGORY	WHITE[2] No.	(%)	BLACK[2] No.	(%)	HISPANIC No.	(%)	ASIAN/PI[3] No.	(%)	AI/AN[4] No.	(%)	TOTAL No.	(%)
MALE												
Male-male sex	5,206	(78)	388	(56)	318	(64)	108	(82)	65	(51)	6,085	(75)
Injection drug use (IDU)	354	(5)	118	(17)	66	(13)	4	(3)	21	(16)	563	(7)
IDU & male-male sex	734	(11)	69	(10)	43	(9)	4	(3)	31	(24)	881	(11)
Heterosexual contact	79	(1)	35	(5)	23	(5)	3	(2)	4	(3)	144	(2)
Hemophilia	77	(1)	1	(<1)	1	(<1)	1	(1)	0	(0)	80	(1)
Transfusion	60	(1)	3	(<1)	5	(1)	1	(1)	1	(1)	70	(1)
Mother at risk/has HIV	6	(<1)	5	(1)	0	(0)	0	(0)	1	(1)	12	(<1)
Undetermined/other	178	(3)	78	(11)	42	(8)	11	(8)	5	(4)	314	(4)
MALE SUBTOTAL (row %)	**6,694**	**(82)**	**697**	**(9)**	**498**	**(6)**	**132**	**(2)**	**128**	**(2)**	**8,149**	**(100)**
FEMALE												
Injection drug use (IDU)	117	(30)	53	(39)	6	(12)	2	(11)	15	(65)	193	(31)
Heterosexual contact	200	(51)	51	(38)	30	(61)	7	(37)	5	(22)	293	(48)
Hemophilia	3	(1)	0	(0)	0	(0)	0	(0)	0	(0)	3	(<1)
Transfusion	31	(8)	6	(4)	3	(6)	3	(16)	2	(9)	45	(7)
Mother at risk/has HIV	6	(2)	4	(3)	4	(8)	1	(5)	0	(0)	15	(2)
Undetermined/other	33	(8)	21	(16)	6	(12)	6	(32)	1	(4)	67	(11)
FEMALE SUBTOTAL (row %)	**390**	**(63)**	**135**	**(22)**	**49**	**(8)**	**19**	**(3)**	**23**	**(4)**	**616**	**(100)**
TOTAL	**7,084**	**(81)**	**832**	**(9)**	**547**	**(6)**	**151**	**(2)**	**151**	**(2)**	**8,765**	**(100)**

[1]AIDS by 1993 surveillance case definition
[2]And not Hispanic
[3]Asian/Pacific Islander
[4]American Indian/Alaska Native

Table 5. Cumulative AIDS[1] cases by gender and age at diagnosis Reported as of 6/30/99 - King County and WA State

	KING COUNTY				WASHINGTON STATE			
	MALE		FEMALE		MALE		FEMALE	
AGE (YRS)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
< 5	5	(<1)	5	(2)	11	(<1)	12	(2)
5-12	2	(<1)	2	(1)	5	(<1)	3	(<1)
13-19	7	(<1)	3	(1)	22	(<1)	10	(2)
20-29	908	(17)	72	(28)	1,437	(18)	157	(25)
30-39	2,701	(49)	108	(43)	3,896	(48)	251	(41)
40-49	1,387	(25)	38	(15)	2,027	(25)	116	(19)
50-59	388	(7)	15	(6)	571	(7)	42	(7)
> 59	93	(2)	10	(4)	180	(2)	25	(4)
TOTAL	**5,491**	**(100)**	**253**	**(100)**	**8,149**	**(100)**	**616**	**(100)**

[1] AIDS by 1993 surveillance case definition

Table 6. AIDS[1] cases, deaths, and case-fatality rates by year Reported as of 6/30/99 - King County and WA State

	KING COUNTY				WASHINGTON STATE		
YEAR OF DIAGNOSIS	CASES	(% TOTAL WA CASES)	DEATHS[2]	CASE-FATALITY RATE (%)[3]	CASES	DEATHS[2]	CASE-FATALITY RATE (%)[3]
1982	1	(100)	1	(100)	1	1	(100)
1983	11	(55)	11	(100)	20	20	(100)
1984	60	(76)	57	(95)	79	76	(96)
1985	104	(79)	100	(96)	131	127	(97)
1986	186	(75)	177	(95)	249	240	(96)
1987	274	(74)	258	(94)	370	349	(94)
1988	352	(71)	323	(92)	496	458	(92)
1989	460	(73)	414	(90)	627	560	(89)
1990	519	(69)	444	(86)	756	650	(86)
1991	563	(66)	460	(82)	855	704	(82)
1992	621	(67)	425	(68)	924	646	(70)
1993	647	(65)	363	(56)	999	573	(57)
1994	540	(61)	225	(42)	888	375	(42)
1995	502	(64)	112	(22)	784	190	(24)
1996	407	(58)	36	(9)	696	75	(11)
1997	281	(56)	31	(11)	498	54	(11)
1998[4]	190	(57)	11	(6)	335	25	(7)
1999[4]	26	(46)	2	(8)	57	5	(9)
TOTAL	**5,744**	**(66)**	**3,450**	**(60)**	**8,765**	**5,128**	**(59)**

[1]AIDS by 1993 surveillance case definition
[2]Number of deaths among persons diagnosed each year
[3]Percent of cases diagnosed in each year whose deaths have been reported to date
[4]Reporting for recent years is incomplete

Table 7A. AIDS cases by HIV exposure category and year of diagnosis Reported as of 6/30/99 - King County

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Male-male sex	352	(70)	281	(69)	177	(63)	116	(61)	13	(50)
Injection drug use (IDU)	47	(9)	35	(9)	14	(5)	20	(11)	3	(12)
IDU & male-male sex	45	(9)	30	(7)	30	(11)	17	(9)	4	(15)
Heterosexual contact	21	(4)	20	(5)	16	(6)	10	(5)	1	(4)
Hemophilia	1	(<1)	3	(1)	3	(1)	0	(0)	0	(0)
Transfusion	1	(<1)	0	(0)	3	(1)	2	(1)	0	(0)
Mother at risk/has HIV	1	(<1)	3	(1)	1	(<1)	0	(0)	0	(0)
Undetermined/other[3]	34	(7)	35	(9)	37	(13)	25	(13)	5	(19)

Table 7B. AIDS cases by HIV exposure category and year of diagnosis Reported as of 6/30/99 - Other Counties

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Male-male sex	136	(48)	144	(50)	96	(44)	62	(43)	11	(35)
Injection drug use (IDU)	54	(19)	49	(17)	38	(18)	31	(21)	9	(29)
IDU & male-male sex	19	(7)	28	(10)	17	(8)	10	(7)	3	(10)
Heterosexual contact	32	(11)	44	(15)	28	(13)	19	(13)	3	(10)
Hemophilia	6	(2)	2	(1)	4	(2)	0	(0)	0	(0)
Transfusion	6	(2)	4	(1)	4	(2)	1	(1)	0	(0)
Mother at risk/has HIV	3	(1)	1	(<1)	1	(<1)	0	(0)	0	(0)
Undetermined/other[3]	26	(9)	17	(6)	29	(13)	22	(15)	5	(16)

Table 7C. AIDS cases by HIV exposure category and year of diagnosis Reported as of 6/30/99 - WA State

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Male-male sex	488	(62)	425	(61)	273	(55)	178	(53)	24	(42)
Injection drug use (IDU)	101	(13)	84	(12)	52	(10)	51	(15)	12	(21)
IDU & male-male sex	64	(8)	58	(8)	47	(9)	27	(8)	7	(12)
Heterosexual contact	53	(7)	64	(9)	44	(9)	29	(9)	4	(7)
Hemophilia	7	(1)	5	(1)	7	(1)	0	(0)	0	(0)
Transfusion	7	(1)	4	(1)	7	(1)	3	(1)	0	(0)
Mother at risk/has HIV	4	(1)	4	(1)	2	(<1)	0	(0)	0	(0)
Undetermined/other[3]	60	(8)	52	(7)	66	(13)	47	(14)	10	(18)

[1]Reporting for recent years is incomplete

[2]Year to date (cases reported as of 6/30/99)

[3]Includes patients for whom exposure information is incomplete (due to death, refusal to be interviewed, or loss to follow-up), patients still under investigation, patients whose only risk was heterosexual contact where the risk of the sexual partner was undetermined, persons exposed to HIV through their occupation, and patients whose mode of exposure remains undetermined

Table 8A. AIDS cases by age/gender and year of diagnosis Reported as of 6/30/99 - King County

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Adult Male Cases	467	(93)	377	(93)	257	(91)	173	(91)	25	(96)
Adult Female Cases	34	(7)	27	(7)	23	(8)	17	(9)	1	(4)
Pediatric Cases	1	(<1)	3	(1)	1	(<1)	0	(0)	0	(0)

Table 8B. AIDS cases by age/gender and year of diagnosis Reported as of 6/30/99 - Other counties

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Adult Male Cases	231	(82)	237	(82)	180	(83)	125	(86)	21	(68)
Adult Female Cases	48	(17)	51	(18)	36	(17)	20	(14)	10	(32)
Pediatric Cases	3	(1)	1	(<1)	1	(<1)	0	(0)	0	(0)

Table 8C. AIDS cases by age/gender and year of diagnosis Reported as of 6/30/99 - WA State

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Adult Male Cases	698	(89)	614	(88)	437	(88)	298	(89)	46	(81)
Adult Female Cases	82	(10)	78	(11)	59	(12)	37	(11)	11	(19)
Pediatric Cases	4	(1)	4	(1)	2	(<1)	0	(0)	0	(0)

[1] Reporting for years is incomplete
[2] Year to date (cases reported as of 6/30/99)

Table 9. Deaths of reported AIDS cases by year of death Reported as of 6/30/99 - King County, Other counties, WA State

	1995		1996		1997		1998[1]		1999[1,2]	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
King County	439	(68)	280	(62)	102	(49)	86	(62)	13	(54)
Other Counties	202	(32)	174	(38)	106	(51)	53	(38)	11	(46)
All WA State	641	(100)	454	(100)	208	(100)	139	(100)	24	(100)

[1] Reporting for recent years is incomplete
[2] Year to date (deaths reported as of 6/30/99)

Table 10. Estimated number of persons living with AIDS at year's end King County, Other counties, WA State

	1996		1997[1]		1998[1]	
	No.	(%)	No.	(%)	No.	(%)
King County	2,027	(64)	2,251	(64)	2,406	(62)
Other Counties	1,142	(36)	1,290	(36)	1,468	(38)
All WA State	3,169	(100)	3,451	(100)	3,874	(100)

[1]AIDS cases numbers adjusted for reporting delay through 1998

HIV Reporting in Washington State: Questions & Answers

At its July 1999 meeting the State Board of Health voted unanimously to implement HIV case reporting in Washington State. Reporting started September 1, 1999 and applies to both adult/adolescent and pediatric HIV cases. The final HIV reporting plan as adopted by the Board of Health is unique among all the reportable diseases in Washington in that names are used only in the initial case report and then converted to a non-name code within three months. Washington's system is also unique among the 33 states which require named HIV reporting. This fact sheet asks and answers the most common questions about how the HIV reporting system works in Washington State.

Q. What does it mean for HIV to be reportable? HIV is now one of more than 50 diseases of public health importance in Washington State for which health care providers must report cases to local health departments. Other diseases that are reportable include tuberculosis, measles, whooping cough, rabies, food-borne illnesses, and many sexually transmitted diseases.

Disease case reports are maintained by health departments with even more security than is typically true of confidential medical records. Information gained from disease reporting is used to plan care and disease control programs and, depending on the specific disease, to prevent further spread and assure treatment of individual cases of disease.

Q. When did AIDS and HIV reporting begin? Reporting of cases of AIDS began country-wide in 1984, soon after AIDS was first described. In 1987, symptomatic HIV infection became reportable by name in Washington State in recognition of the wider spectrum of serious illness caused by HIV. In July 1999, the State Board of Health passed a rule making asymptomatic HIV infection reportable beginning September 1, 1999.

Q. Why was HIV infection reporting adopted at this time ? About 8,500 cases of AIDS or symptomatic HIV have been reported in Washington State. Of these, about 3,500 are living. Another 6,000 to 8,000 HIV-infected persons with HIV are estimated to reside in the state. People with HIV infection are now staying healthier, leading more productive lives, and staying free of AIDS longer with the help of powerful new drug combinations. In fact, the number of new cases of AIDS in this state has dropped from a high of 650 in 1993 to about 300 in 1997.

At the same time, it is thought that the number of HIV infections has gradually increased since 1993, however, without HIV reporting this cannot be measure directly. This means that the tracking of AIDS cases is no longer a reliable way to understand the epidemic. Expanding to include reporting of all cases of HIV infection was necessary to better understand the current dynamics of HIV transmission and to better define the scope of the epidemic and the services necessary to address it. The majority of states now require HIV reporting.

Q. Are the names of persons with HIV and AIDS reported? I've heard about coding of names—what is this about? As for all other reportable diseases in Washington State, HIV and AIDS are reported by name and other identifiers. However, for cases of asymptomatic HIV infection, the name of the person will be converted to a non-name code within 90 days after the receipt of a completed case report. Case reports on AIDS and symptomatic HIV will continue to be retained using names, as has been done since 1984.

For HIV cases, having the name initially reported allows public health staff to complete case reports and accurately create the unique identifier (non-name) code. In the few states that have pure unique identifier reporting (e.g., Maryland and Illinois) the provider or laboratory must formulate the code; this creates a burden on providers and labs, and leads to inaccurate or incomplete codes that hinder the ability to eliminate duplicate cases or do other quality assurance activities.

Q. Why are codes being used for HIV cases? Nearly two years of intense public debate preceded the State Board of Health's decision to adopt this system of named reporting with subsequent conversion to a non-name identifier code. While over 8,000 AIDS and symptomatic HIV cases have been reported by name

Current Status of HIV Infection Reporting - September 1999

Name-Based Reporting

Alabama
Alaska
Arizona
Arkansas
Colorado
Florida
Idaho
Indiana
Iowa
Kansas
Louisiana
Michigan
Minnesota
Mississippi
Missouri
Nebraska
Nevada
New Jersey
New Mexico
North Carolina
North Dakota
Ohio
Oklahoma
South Carolina
South Dakota
Tennessee
Texas
Utah
Virgin Islands
Virginia
Washington[7]
West Virginia
Wisconsin
Wyoming

Pediatric Only
Connecticut[1]
Oregon[2]

Symptomatic Infection Only[3]
Maryland[4]

Non-Name-Based Reporting*

Georgia
Illinois
Kentucky
Maine
Maryland[4]
Massachusetts
Montana
New Hampshire
Oregon[2]
Rhode Island

Reporting Not Required

California
Connecticut[1]
Delaware
Hawaii
New York[6]
Pennsylvania
Puerto Rico
Vermont[6]
District of Columbia

***Illinois, Maine, Maryland, and Massachusetts conduct HIV case surveillance using a coded identifier and attempt to conduct follow-up activities to fill in gaps in the information received. Providers, hospitals, and labs in the other states in this column send health departments individual-level HIV data using a variety of coded identifiers, such as initials, a date of birth, or a test number. These states generally do not conduct any follow-up activities on this HIV case information and have not evaluated the usefulness or completeness of their HIV reporting systems.

[1]Requires named reports of HIV infection in children < 13 years of age. Reports of HIV infection not required for adults/adolescents 13 and older.

[2]Requires named reporting only for HIV infection in children < 6 years of age and in limited other circumstances.

[3]As defined in CDC classification of Group IV Non-AIDS (CDC, 1986).

[4]Uses unique identifier system for HIV reporting. Requires named reporting of symptomatic HIV infection and AIDS.

[5]Requires named reporting of symptomatic HIV infection and AIDS.

[6]HIV reporting passed by law, rule, or regulation in 1998 or 1999, but reporting not yet implemented.

[7]Reporting of HIV and AIDS by name with conversion to code for asymptomatic HIV cases.

States in *italics* offer only confidential and not anonymous HIV testing. All other U.S. states and territories offer anonymous testing.

SOURCE: Centers for Disease Control and Prevention

without a breach of confidentiality in Washington State, there was concern on the part of many members of the AIDS advocacy community about the confidentially of HIV case reports. Some of the concerns were: What if someday some government agency demanded the registry of HIV cases from the state health department? What if named HIV reporting stopped some people from having an HIV test or seeking care? What if someone breaks into the computer system or health department offices to obtain the names?

The State Board of Health and state and local health departments recognized the concerns of the community and sought to develop a system that would provide increased protections and not deter HIV testing by those at risk of infection. What was finally adopted was an innovative system of HIV reporting that combines features of both standard named reporting and unique identifier systems used in a few states (see accompanying table). It is felt that this system will provide high quality epidemiological data and allow the disease control functions of public health to take place while alleviating concerns about having a named statewide HIV registry maintained in perpetuity. The system as implemented was supported by major community advocacy groups in the state including the Governor's Advisory Council on HIV/AIDS, Northwest AIDS Foundation, and the People of Color Against AIDS Network.

Q. How does this new system of HIV reporting work in Washington State? Health care providers and laboratories report cases of HIV and AIDS by name to the local health department. For cases of asymptomatic HIV infection, patient names are encoded by the local health department within 90 days after receipt of a complete case report. For smaller local health jurisdictions without the capacity to gather case reports, state health department staff may act as an agent of the local department for the purpose of collecting and completing case reports. However, patient names will be left at the local health department and not retained by state staff. Within 90 days, patient names are encoded then destroyed from both hard copy and computer reports.

Only the coded identifier is sent to the state Department of Health or on to the CDC. Thus, the state and federal government never have a list of names of persons with asymptomatic HIV and local health departments have the names for only 90 days. Laboratory reports are used to supplement provider-based reporting and have been found to greatly improve the completeness of case reporting (see next question).

Q: What if a health care provider forgets to report a case? By law, HIV and AIDS cases are to be reported within 7 days of diagnosis. However, often times providers do not report on time or assume that another care provider has reported the case. To assure complete and accurate epidemiological data, supplementary laboratory reporting of results diagnostic of HIV and AIDS (like many other diseases) has proven essential. Nearly all HIV-infected persons receiving health care from a provider have periodic laboratory tests to assess the effectiveness of treatment in reducing the amount of HIV in their blood ('viral load' tests) and to determine how well their immune system is functioning (CD4 tests).

Results of these tests which indicate HIV infection or AIDS must be reported by laboratories to public health. These lab reports are checked against already-reported cases using the non-name code and unreported cases prompt a call to the health care provider who ordered the test to verify the case and complete a report. The health care provider is then educated about the rule and provided with ongoing assistance in achieving communicable disease reporting compliance in the future.

Q. What is the non-name identifier code like? Unique identifier codes work by including enough information about an individual to be unique, that is to be able to distinguish one case report from another. The code, however, cannot be translated back into a name. Information in the coded identifier in Washington includes gender, patient birth date, alpha-numeric code elements generated from the first and last names; and the last four digits of the social security number. This code is non-identifying yet contains enough information unique to each individual that coded cases in the registry can be matched accurately to incoming lab reports, subsequent duplicate case reports, or death records.

Q: Can people still get anonymous testing for HIV? Yes. The availability of anonymous HIV testing is considered vital and public health officials across the state are required by the new rule to make anonymous testing reasonably available. Anonymous testing is available through all local health jurisdictions, other community organizations in some jurisdictions (e.g., Planned Parenthood clinics), and through home testing kits available in many pharmacies. Sites offering anonymous HIV testing can be located by calling the HIV/STD Hotline sponsored by Public Health—Seattle & King County at 206.205-7837 (services are available in Spanish) or the Washington State HIV/AIDS Hotline at 1-800-272-2437. Both hotlines operate from Monday through Friday, 8 am to 5 pm.

Q: Are anonymous HIV test results reportable? No. Positive HIV results obtained through anonymous testing are not reportable. However, when HIV+ patients are seen for health care the case must be reported by the provider. Reporting is done only after the provider has seen the patient and had a chance to answer any questions the patient may have about the 'hows and whys' of reporting.

Q. Are there other circumstances when HIV is not reportable? Yes. In writing the HIV reporting rule, the Board of Health exempted providers conducting clinical HIV research from reporting if the research has institutional (human subjects) review board approval and if the project has a system in place to remind the subjects' main health care providers of their HIV/AIDS reporting obligations.

Q. How is the privacy of persons reported with HIV protected? Health care providers and public health officials remain bound by the same stringent confidentiality laws which have been applicable to AIDS and other sexually transmitted diseases (RCW 70.24.105,WAC 246-100-016). Records relating to HIV & AIDS, like those of sexually transmitted diseases, drug abuse, and mental illness have exceptionally protected status. Violation of these confidentiality laws is a misdemeanor and is subject to civil liability action for reckless or intentional disclosure up to a penalty of $10,000 or actual damages, whichever is greater.

For decades, health providers have reported the names of people infected with other communicable diseases, such as syphilis, gonorrhea and tuberculosis and maintained the highest level of confidentiality. Extra measures have been built into the HIV/AIDS reporting system in Washington State to further safeguard persons from potential discrimination and to reassure those concerned about named reporting through the feature of converting names to codes soon after reporting.

Public health workers are trained in protecting confidentiality and are committed to safeguarding the privacy of persons infected with HIV, as they always have been with AIDS. Extensive measures are taken to assure the confidentiality and security of case reports and computers used to store data, even when these records do not contain patient names.

Q. What is the connection between HIV/AIDS partner notification and HIV reporting? Washington State law requires health care providers to offer partner notification assistance to persons diagnosed with HIV infection (RCW 70.24.320(2) and RCW 70.24.022) and the state's administrative code establishes the rules for providing such assistance (WAC 246-100-072). The new HIV/AIDS case report form now in use in Washington State includes a check box for providers to request local health department assistance in discussing or conducting partner notification for HIV cases diagnosed after 9/1/99. The provider may also indicate that he or she is assuming the responsibility for discussing partner notification with the patient and offering a partner notification interview.

If the reporting provider requests health department assistance or if neither box is checked, local health department staff trained in STD/HIV partner notification services will contact the provider to discuss partner notification issues; patients will be contacted by public health staff only after discussions with the primary provider and with consent of the patient. Notification of sex or needle-sharing partners is entirely voluntary and depends on the cooperation of the person diagnosed with HIV.

Q. How will public health officials know if reporting of HIV cases is giving useful results? The Department anticipates that 4,000 to 5,000 HIV case reports will be submitted in the first two years after the start of HIV reporting. Most of these cases will be persons previously diagnosed with HIV, but as many as 750 per year statewide will be new HIV infections. The risk information obtained on these newly-diagnosed persons will provide public health officials and the community with a much clearer understanding of the current epidemiology of ongoing HIV transmission in Washington State. Information on the combination of previously-diagnosed and newly-diagnosed cases will give a much more accurate estimate of the number of HIV infections in Washington and how they are distributed throughout the state. Comparisons to older data on AIDS cases will provide information about epidemiological trends in HIV transmission.

As part of the new HIV reporting rule, the Board of Health mandated that the State Health Officer report on an evaluation of the reporting system after 12 months of operation — to assess its ability to meet federal performance standards for HIV surveillance in terms of completeness, timeliness, and accuracy; the costs to local and state public health operations; the impact on disease control; and any effects on HIV test- and care-seeking behavior of high risk groups.

Q. How is the information collected through HIV and AIDS reporting disseminated and used? State and local health departments prepare a variety of regular reports, newsletters, and slide series containing compiled AIDS case report data. These will be updated in late 1999 and into 2000 to contain HIV case report data. Reports are sent to established mailing lists and some (such as this report) are available in the Seattle and King County library systems and in certain schools and colleges. Many of these reports are now posted in public health web sites such as www.metrokc.gov/health/apu/. Case data from Washington State are also sent monthly to the federal Centers for Disease Control and Prevention and become part of the national statistics on HIV and AIDS.

Information from case reporting is used to:

❑ *Direct HIV prevention programs to populations and geographic locations most affected;*

❑ *Determine the level of need and plan AIDS care services;*

❑ *Understand the changing epidemiology and future impact of the epidemic;*

❑ *Evaluate the effectiveness of HIV prevention programs;*

❑ *Allocate funds and other resources for HIV prevention and treatment equitably;*

❑ *Apply for federal funds based on the number of HIV/AIDS cases reported;*

❑ *Educate individuals on routes of HIV transmission and their risk profile;*

❑ *Educate legislators and other policy makers on the magnitude of the epidemic and the need for continued funding of prevention and care services.*

Q. Where can I get more information about HIV reporting? You can contact your local health department or regional AIDSNet director. In Seattle-King County, call Drs. Susan Barkan or Sharon Hopkins at (206)296-4645. They can be reached by email at:

susan.barkan@metrokc.gov, or
sharon.hopkins@metrokc.gov.

At the Washington Department of Health, contact Dr. Christopher Spitters at (360)236-3412 or Jack Jourden at (360)236-3466. Copies of the WA Administrative Code pertaining to HIV/AIDS reporting and confidentiality of reported data are available upon request.

❑ *Contributed by Sharon G. Hopkins DVM, MPH, Christopher Spitters MD, MPH, Jack Jourden MPH, and John Peppert*

HIV Testing Patterns among Seattle-area YMS Participants

The HIV/AIDS Epidemiology Program of Public Health - Seattle & King County is a participant in the CDC-Sponsored Young Men's Survey (YMS) and conducted YMS Phase 1 between October 1997 and October 1998. The purpose of YMS is to assess HIV and hepatitis B prevalence, sexual and drug-use behaviors, psychosocial factors, and health history among young men who have sex with men (MSM). This report describes HIV testing patterns among 15-22 year old men who participated in Phase 1. An overview of results from the study was published in an earlier issue of this report.[1]

Methods

The Young Men's Survey is an anonymous cross-sectional probability sampling survey that uses multi-stage sampling to recruit young men at venues in the community that are frequented by young MSM.[1,2] Sampling venues are identified through a community assessment process and include street locations, bars, dance clubs, beaches and other locations or events that are popular with young MSM. Those venues that yield 7 or more eligible participants in a 4-hour period are included in a sampling frame from which 12-16 events are randomly chosen each month to construct a sampling calendar. During Phase 1 sampling events YMS interviewers approached potential participants and asked them about their age and residence to determine eligibility. Those who were between 15 and 22 years old and resided in King County were eligible for the study and invited to participate.

The YMS team used a 29 foot long recreational vehicle as a field office. After obtaining informed consent, the interviewer administered a standardized questionnaire, provided counseling for HIV, hepatitis B and other sexually transmitted diseases and drew blood for testing. Referrals to health and social services were provided as needed and all participants received free condoms and a monetary incentive. A post-test counseling appointment was also scheduled. The overall post-test return rate was 53%, but after implementation of an anonymous reminder system and relocation of the YMS office to a area of town closer to most sampling venues mid-way through the survey period, the rate increased to 56%.

Results

Between October 1997 and October 1998, the YMS team conducted 211 sampling events at 33 venues and intercepted 4,395 men of whom 851 were eligible for the study. A total of 528 (62%) agreed to participate and 377 (71%) reported sex with other men. Nine were determined to be duplicate participants and thus the final MSM sample available for this analysis was 368. Thirty percent were 15-18 years old and 70% were 19-22 years old. Sixty-four percent identified themselves as White, 8% as Black, 15% as another race/ethnicity, and 15% as mixed racial/ethnic background. The median number of life-time sex partners was 6. In the 6 months prior to the survey, two-thirds reported anal sex, 41% reported unprotected anal sex, and 28% and 62% reported using amphetamines and marijuana, respectively. Eight participants (2%) were HIV-positive—7 of the 8 were between 19 and 22 (data not shown).

A total of 260 (71%) (including 58% of 15-18 year olds and 76% of 19-22 year olds) reported prior HIV testing (Table 1). Among these 260 participants, over half of the 19-22 year olds reported 3 or more prior HIV tests compared to 33% of the younger group (Table 1). Two-thirds had been tested by age 18. Three-quarters reported testing within the last year, 9% tested between 12 and 17 months earlier, and 15% reported 18 months or longer since their last test. Community clinics (31%) and health department clinics (30%) were the most commonly reported testing sites; 19% reported testing at a private provider's office or health maintenance organization (HMO), and 16% at hospital clinics or emergency rooms (ER). Nobody reported using a home testing kit.

Participants who reported that their usual site of health care was a community or health department clinic were more likely to have had a previous HIV test (89% and 86%, respec-

tively) compared to participants who sought regular health care at a private provider or HMO (68%) or hospital clinic ER (70%) (Table 2). Those who went to community and health department clinics for their regular health care were also more likely to have had a prior HIV test at this type of facility (68% and 59%, respectively) compared to those who went to private providers/HMOs or hospital clinics/ERs (22% and 24%, respectively).

Among the 107 participants who had not been tested previously, "perceived low risk of HIV infection" was the most commonly cited reason (61%) followed by "afraid to learn results" (41%), or scared of needles (17%). Eleven percent said that access, cost of testing or other logistic difficulties had prevented them from seeking testing while 8% said they meant to but had procrastinated or didn't have time, and 6% percent said they didn't care.

Local health guidelines recommend HIV testing every three months for MSM who have unprotected anal or oral sex or share any drug injection equipment to increase the likelihood of early diagnosis, referral for early treatment, and assistance with partner counseling. Sixteen percent of all the participants reported testing in the last 3 months. The time period referenced in the YMS questionnaire was the 6 months prior to the interview, so it is not possible to assess behaviors in the past 3 months in relation to testing practices.

Table 3 shows behaviors reported in the past 6 months in relation to the time of the most recent HIV test. One-hundred-and-seven (29%) had tested within the last 6 months, 24% between 6 and 11 months ago, 17% over 12 months ago, and 29% had never been tested. There was a statistically significant trend toward more recent HIV testing associated with a higher frequency of some recently reported risky behaviors. Compared to those who had never tested, participants who tested in the past 6 months were more likely to report anal sex (75% vs 53%), 2 or more male sex partners (80% vs 48%), sex with an injection drug user (20% vs 5%), and being high on alcohol during sex (52% vs 38%). In spite of these differences, many of those who tested longer than 6 months ago or had never tested, reported recent risky behaviors such as unprotected anal sex with a non-steady partner, that warranted testing.

Table 4 compares characteristics and behaviors of participants who had never had an HIV test with those who had been tested. Prior testing was significantly more frequent among those who were older, out to more than half the people they knew, had a prior STD diagnosis, had been in jail/juvenile detention, had more sex partners, a history of sex with an injection drug user, knew someone with HIV or someone who had died from HIV, or had sex while high on marijuana, ecstasy, or alcohol in the last 6 months (Table 4). Self-reported prior HIV testing was not associated with race/ethnicity, sexual identity, gender of sex partners, or unprotected anal sex in the last 6 months with steady or non-steady partners.

Comments

Results from the Seattle area YMS show that although 71% reported prior HIV testing, 42% of the 15-18 year olds had never been tested before. In comparison, a 1992 telephone survey of MSM over 18 years who resided in 5 Seattle neighborhoods showed that 88% had previously been tested.[3] While those who reported multiple male sex partners and sex with an injection drug user in the last 6 months were more likely to have been tested recently, testing was less frequent than current local public health guidelines recommend and many participants who reported behaviors that could have exposed them to HIV had never been tested. Perception of low risk was the most common reason for never having tested before, but a high proportion also cited fear of learning the results, and 17% said they were afraid of needles indicating an ongoing need to address these issues to improve testing rates in this age group.

The most common testing sites for this age group were community and health department clinics, and participants who reported using these facilities for regular health care were more likely to have been tested than participants who reported private providers/HMOs or hospital clinics/ERs as their usual source of health care. Considering that over half of the sample reported private physicians and HMOs as their usual source of health care, it appears that better ascertainment of risk and more frequent HIV testing in these settings should be promoted with continued referral to health department and community clinics

Table 1. HIV testing history among 15-22 year-old Seattle-area YMS participants with prior HIV testing

HIV testing history*	15-18 years n=64 %	19-22 years n=196 %	Total n=260 %
Number of HIV tests			
1	56	25	32
2	11	21	19
3+	33	54	49
Age at first test			
<15	30	4	10
15-16	38	13	19
17-18	32	41	38
19-20	NA	35	27
21-22	NA	8	6
Months since last test			
<6 months	44	41	42
6-11	28	36	34
12-17	8	9	9
18+	20	13	15
Any site of HIV testing			
Private provider/HMO	19	19	19
Blood bank/plasma center/Red Cross	2	4	4
Hospital clinic/Emergency room	14	16	16
Health department clinic	25	31	30
Community clinic	33	30	31
Part of a research study	0	4	3
Home testing kit	0	0	0

*HIV testing history was missing on one participant; data on last test were missing on 4 participants

for those who desire anonymous testing. Health department and community clinics may also be better equipped to provide comprehensive HIV counseling, especially for higher risk clients. In fact, results from the 1993-94 Behavioral Risk Factor Surveillance System showed that those who were tested in public settings were twice as likely to have received counseling as those who were tested in the private sector.[4]

Our findings are in agreement with those from other YMS sites[5] and emphasize the continued need to educate young MSM about safer sex and drug- and alcohol-use practices and the importance of HIV counseling and testing. Our findings also indicate a continued need to educate providers in private practice and HMOs about assessing HIV risks in young men and providing more HIV counseling and testing, or increase referral of those who may prefer anonymous testing to anonymous health department testing sites.

Please contact Hanne Thiede (hanne.thiede @metrokc.gov) or (206)296-7879) or Tom Perdue (tom.perdue@metrokc.gov) or (206)205-7357 if you have questions about the Young Men's Survey.

❑ *Contributed by Hanne Thiede DVM, MPH, Tom Perdue, and the Seattle Phase 1 YMS Team (Stanley Brown, Allan Carandang, Leonard Dawson, Jan Fields, Patrick Gonzalez, Justin Haines, David Miller, Jason Naki, Misha Williams, and Robert Yoon)*

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[1]Thiede, H, Perdue, T, and the YMS Team. The Seattle Area Young Men's Survey: Phase 1 Results. **HIV/AIDS Quarterly Epidemiology Report** 1998, 4th Quarter.

Table 2. Comparison of usual site of health care versus HIV testing site among 15-22 year old Seattle-area YMS participants

Any site of HIV testing[2]	Any site of usual health care[1]				
	Community health clinic n=66 No. (%)	Health dept. clinic n=37 No. (%)	Private provider/HMO n=189 No. (%)	Hospital clinic/ER n=70 No. (%)	Total participants n=368 No. (%)
Previous test	58 (89)	32 (86)	128 (68)	49 (70)	260 (71)
Community clinic	**45 (68)**	1 (3)	28 (15)	17 (24)	80 (31)
Health dept. clinic	8 (12)	**22 (59)**	42 (22)	12 (17)	77 (30)
Private provider/HMO	3 (5)	2 (5)	**42 (22)**	9 (13)	49 (19)
Hospital clinic/ER	6 (9)	6 (16)	21 (11)	**17 (24)**	41 (16)

[1]The individual categories do not add up to 368 or 100% because only the most common health care categories are shown and each responder can mention more than one site

[2]The individual testing sites do not add up to 260 or 100% because only the most common HIV testing categories are shown and each responder can mention more than more than one site

Table 3. Time of last HIV test among 15-22 year old Seattle-area YMS participants by selected reported risk behaviors

Sexual and drug-use behaviors in the last 6 months	Time (months) since last HIV test				
	< 6 mos n=107 %	6-11 mos n=88 %	12+ mos n=62 %	Never tested n=107 %	p_{trend}
Any anal sex	75	74	61	53	<0.01
Any unprotected anal sex	46	40	36	39	NS
Unprotected anal sex w/non-steady partner	21	16	24	22	NS
0 male sex partners[1]	8	7	18	22	<0.01
1 male sex partner[1]	12	26	23	30	<0.01
2+ male sex partners[1]	80	67	60	48	<0.01
Any female sex partners	23	8	35	19	NS
Injected drugs	7	5	8	3	NS
Sex with IDU	20	9	15	5	<0.01
Sex with HIV+ person[2]	12	7	5	2	NS
High on amphetamine during sex	13	14	17	8	NS
High on alcohol during sex	52	55	47	38	0.03

[2]MacKellar D, Valleroy L, Karon J et al. The Young Men's Survey: Methods for estimating HIV seroprevalence and risk behaviors among young men who sex with men sampled in six urban areas. **Public Health Rep** 1996; 111(Suppl 1):138-144.

[3]Campsmith M, Goldbaum G. Report on a Telephone Survey of Men Who Have Sex with Men (MSM). **HIV/AIDS Quarterly Epidemiology Report** 1995, 3rd Quarter.

[4]Thiede H, Song L. HIV testing in Seattle-King County - Results from the Behavioral Risk Factor Surveillance System (BRFSS). **HIVAIDS Quarterly Epidemiology Report** 1995, 4th Quarter.

[5]Valleroy l, MacKellar D, Bartholow B, Secura G and the young Men's Survey team. Prevalence, Predictors and Presumptions for Never Having Been HIV Tested Among Young Men Who Have Sex With Men in Seven Urban Areas. National STD Conference, 1998 (abstract).

Table 4. Comparison of 15-22 year old Seattle-area YMS participants with and without a history of prior HIV testing

Characteristics	Prior HIV test(s) n=260 %	No prior HIV test n=107 %	p
Age (years)			
15-18	25	43	
19-22	75	57	<0.01
Being out			
< Half of people they know	13	26	
Half + of people they know	87	74	<0.01
History of STD			
No	83	95	
Yes	17	5	<0.01
Ever been in jail			
No	72	84	
Yes	28	16	0.02
Number of male sex partners ever			
1	7	22	
2-4	20	37	
5+	73	41	<0.01
Number of male sex partners last 6 months			
0	10	22	
1	19	30	
2+	71	48	<0.01
Sex with IDU in the last 6 months			
No	85	95	
Yes	15	5	<0.01
Know someone with HIV			
No	17	60	
Yes	83	40	<0.01
Known someone with HIV who died			
No	55	78	
Yes	45	22	<0.01
High on marijuana during sex last 6 months			
No	65	84	
Yes	35	16	<0.01
High on ecstasy during sex last 6 months			
No	90	97	
Yes	10	3	0.03
High on alcohol during sex last 6 months			
No	48	62	
Yes	52	38	0.02
Ever injected drugs			
No	84	93	
Yes	16	7	0.03

One participant was missing information on prior HIV testing

HIV/AIDS program
Public Health Seattle & King County

HAP REPORT: HIV Incidence among Men Who Have Sex with Men in King County

To estimate the seroincidence of Human Immunodeficiency Virus (HIV) among King County men who have sex with men (MSM), we conducted an analysis of HIV antibody test results for MSM who sought repeat testing in the HIV/AIDS Program (HAP) Client Services Clinic. The proportion of MSM who initially tested negative and at a later date tested positive for HIV antibodies (seroconverters) was used to estimate of HIV seroincidence in this population.

From June, 1986, through December, 1998, the HAP Clinic registered for HIV antibody testing 16,809 men who identified as gay or bisexual, reported having sex with other men, or reported receptive oral sex or receptive anal sex. Of these, 4,446 MSM met the following inclusion criteria:

- ☑ *Initially tested negative for HIV antibodies,*
- ☑ *Were retested prior to December 1998, and—*
- ☑ *Did not have inconclusive test results on either their initial or last test.*

For these repeatedly-tested MSM, the period of observation used in calculating incidence was estimated in two ways: For a man who tested antibody-negative at his most recent visit, the period of observation was the interval between his initial negative test and his most recent test. For a man who tested antibody-positive after having a negative test (i.e., a seroconverter), the midpoint between the most recent negative test and the first positive test was considered the time at which infection was most likely to have occurred (assuming a Poisson distribution of new infections). Thus, the period of observation for a seroconverter was the interval between the initial negative test and the last negative test, plus half of the period between the last negative test and the first positive test. For a seroconverter whose only test following an initial negative test was positive, half of the interval between the initial negative test and the subsequent positive test was used.

For the period 1987-1998, overall sero-incidence among MSM tested repeatedly at the HAP Clinic was estimated to be 1.4 per 100 person-years of observation (95 percent confidence interval 1.3-1.7). The sero-incidence was highest (1.7) in 1989-1990, but appears to be gradually increasing since 1991-1992 (Table 1).

These results must be interpreted cautiously. First, because these seroincidence rates depend on reliably linking repeat test results for each individual, the rates are underestimated if some clinic clients did not use the same name (if registered confidentially) or unique code (if registered anonymously) when retesting. Second, testing behavior may also contribute to the variations in incidence rates. While men who use the HAP clinic were for

Table 1. HIV seroincidence among MSM tested at the HAP Clinic, 1986-1998

Period	Person years	Sero-conversions	Sero-incidence	Standard Error	95% CI
1986-88	1323	19	0.014	0.003	0.008 - 0.022
1989-90	2472	42	0.017	0.003	0.012 - 0.023
1991-92	3152	41	0.013	0.002	0.009 - 0.018
1993-94	3182	46	0.014	0.002	0.011 - 0.019
1995-96	2417	33	0.014	0.002	0.009 - 0.019
1997-98	985	15	0.015	0.004	0.009 - 0.025

most of the study period encouraged to test every six months (and recently MSM who continue to have unprotected anal sex have been encouraged to test every three months), actual intervals between tests varied widely. Finally, incidence rates among MSM who repeatedly test at the HAP clinic may not be representative of incidence rates among all King County MSM.

Nonetheless, these results suggest that HIV incidence among MSM may recently be increasing. This may reflect changes in behavior, but it could also reflect increasing seroprevalence among MSM—if the MSM population is relatively static, then as many MSM become infected, those who remain uninfected are increasingly likely to be exposed to infected men. Recent increases in syphilis rates among King County MSM suggest that MSM may be engaging in riskier behaviors, but more study is needed to verify this. Regardless, it is clear that HIV remains a major threat to the health of King County.

❑ *Contributed by Ted White MPH and Gary Goldbaum MD, MPH*

Adult AIDS Clinical Trials Unit Report: *"Why do we need new antiretroviral drugs?"*

Fourteen compounds have been approved by the U.S. Food and Drug Administration for treatment of HIV. Each of these agents has a unique set of benefits and side-effects. These agents are members of three classes, when categorized by their mechanism of action (how they inhibit HIV). Guidelines have been developed for how best to use these agents, based upon the results of research studies. The key principles of antiretroviral therapy include the use of a combination of potent agents, and a goal of therapy to suppress the level of HIV RNA (viral load) in the plasma below the limit of what we can measure. However, despite the availability of multiple agents, therapy is often unsuccessful.

In clinical settings, reports suggest that as many as half of persons who start antiretroviral therapy may not achieve long-lasting viral suppression. Limitations of antiretroviral therapy include lack of potency of regimens, the difficulty of taking multiple pills in complex regimens, interactions between antiretrovirals and other drugs (including other antiretroviral agents), and development of resistance to drugs. Consequently, new agents for HIV are needed.

One New Approach - Fusion Inhibitors

Many investigators and pharmaceutical companies are trying to develop drugs that work by novel mechanisms. One of those targets is the receptor on the surface of the cells that HIV attacks. Drugs that interfere with the binding of HIV to cells are called fusion inhibitors. Fusion is the process by which HIV attaches to a cell, an essential step for HIV to enter a cell. In order to get into cells, HIV binds to proteins (receptors) on the surface of cells. In addition to the CD4 (the main receptor for HIV), there are other essential co-receptors. Examples of other co-receptors are CCR5 and CXCR4; these co-receptors exist on mononuclear cells and lymphocytes. One investigational fusion inhibitor, called T-20, has been shown to have anti-HIV activity in humans.

The UW Adult AIDS Clinical Trials Unit (ACTU) is participating in a study of a new investigational fusion inhibitor. This compound is called AMD-3100. In vitro, AMD-3100 has been shown to bind to the co-receptor CXCR4 on the surface of cells. It is hoped that AMD-3100 will block HIV from entering the cells that express this receptor, and therefore have anti-HIV activity. The drug has been studied in animals and in HIV-negative volunteers, and appeared to be safe.

The study at the UW Adult ACTU is a phase I/II study, and is the first study of AMD-3100 in persons with HIV infection. Its major goals are to assess the safety of AMD-3100, its side-effects, and to determine if AMD-3100 has antiviral activity in humans. AMD-3100 is not absorbed when it is taken orally. The current

UNIVERSITY OF WASHINGTON AIDS CLINICAL TRIALS UNIT

HARBORVIEW MEDICAL CENTER, 2 WEST CLINIC, 325 9TH AVENUE, BOX 359929, SEATTLE, WA 98104 -- (206) 731-3184

ANTIRETROVIRAL / IMMUNOLOGICAL STUDIES OPEN FOR ENROLLMENT – JULY/AUG, 1999

TOPIC	TREATMENTS	ELIGIBILITY	LENGTH	MISCELLANEOUS	STUDY #
Use of resistance tests (to plan anti-viral treatment)	None	• Viral load > 2,000 • Plan to change current drug regimen **AND** on • Stable PI's at least 1 month	22 weeks	8 clinic visits total, $25 paid per visit	060
Safety and anti-HIV effect of a new drug, AMD-3100 (fusion inhibitor)	AMD-3100 is given intravenously continuously for 10 days	• 18–55 years of age • Medically stable • All lab tests within normal limits. • No changes to antiretrovirals for >4 weeks prior to entry, **OR** not on antiretrovirals • Viral load > 5,000 / CD4 >50	15 weeks	12 days hospitalization, reimbursement o of $100/day (maximum total $1,200, paid after study completion)	066
Effect of birth control pills or depoprovera on AZT	None	• Any CD4 or viral load • Must be on AZT, and • Starting Ortho-Novum 1/35 of Depoprovera	6 weeks	• ***Women only.*** • Four 10-hour visits; $75 per visit	317
Effect of prednisone, with ARV therapy, on viral load and CD4	• Current stable ARV + prednisone vs. • Current stable ARV + prednisone placebo	• CD4 200-600 • ≥ 18 yrs.	Approx. 18 weeks	• $20 per visit (6 visits) • Reimbursement for sub-studies • Must take bactrim while on study	349
Treatments with protease inhibitors vs. protease inhibitor *sparing* treatments	• Randomized partially blinded trial of six different combination therapies, of 3–4 drugs each • Combinations may include ddI, d4T, EFZ, NFV, or AZT/3TC	• HIV RNA > 500 copies • No prior treatment for HIV • No treatment for infection/ illness within 30 days of entry	2 – 3 years	• Reimbursement for some substudies • Cross-over regimens if treatment fails	384
Combination therapies for virological "failure" on nelfinavir	Randomized open label trial of : • RTV / SQVsgc / EFZ / 2 new NRTIs vs. • IDV / EFZ / 2 new NRTIs vs. • AMP / EFZ / 2 new NRTIs vs. • IDV / AMP / EFZ / 2 new NRTIs	• HIV RNA >5000 after 16 weeks on NFV • >16 week continuous NFV • No prior prescription to both drugs of one of the following: AZT + 3TC **OR** d4T + 3TC **OR** d4T + ddI **OR** AZT + ddI	Approx. 1½ years	• Up to $175 compensation for sub-study participation • No prior NNRTI	400

Screening tests, study medications, and laboratory and clinical monitoring that are part of our studies are free of charge for potential participants.

Physicians or potential participants can call Karen Novak or Margot Perrin at (206) 731-3184 for more information or appointments.

UNIVERSITY OF WASHINGTON AIDS CLINICAL TRIALS UNIT

OPPORTUNISTIC DISEASE & OTHER CONDITION STUDIES OPEN FOR ENROLLMENT – JULY/AUG, 1999

CONDITION	TREATMENTS	LENGTH	DESCRIPTION	STUDY #
Protease inhibitor levels in tissues Any CD4	None	8 weeks	Study of persons planning to start a protease inhibitor. Blood draws and genital fluid collections done at entry, wk 4, wk 8.Four spinal taps (lumbar puncture): $100 reimbursement for first two, $125 each for third and fourth (total $450). If CD4 (T4) count <100, brain scan will be done	032
Hearing Loss with AZT or ddI	None	32 weeks	Persons starting AZT and/or ddI (with other antivirals). $20 reimbursed for each of 3 hearing tests. CD4 counts >200 cells/mm^3. Blood draws & urine sample: entry & wks. 16 & 32	047
Cervical dysplasia (precancerous cervical cells)	Oral isotretinoin (Accutane®) vs. Observation	18+ months	Tests effects of Isotretinoin in HIV+ women with cervical dysplasia. $20 reimbursement for each study visit	293
AIDS Dementia Complex	Memantine vs placebo, in addition to concurrent antiviral therapy	16 weeks	After 16 weeks, there will be 4 weeks off therapy. All subjects will be offered open label memantine for 12 more weeks	301
Thrush in past 2 yrs., CD4 count <150	Fluconazole	24 months	Open label study of fluconazole in two long term management strategies: chronic suppressive vs episodic therapy for thrush	323
Stopping prophylaxis for PCP (Pneumocystis carinii pneumonia)	None	This study will last approximately 2 ½ years	An observational study of persons with CD4 increases on antiretrovirals who: • Had prior PCP diagnosis ≥ 6 months ago • **AND** an increase in CD4 count to ≥200 cells, twice, at least 12 weeks apart Open to persons 13 years and older. Exams and blood draws at 4, 8, and every 8 wks thereafter. $20 for each study visit	888

Screening tests, study medications, and laboratory and clinical monitoring that are part of our studies are free of charge for potential participants.

Physicians or potential study participants can call Karen Novak or Margot Perrin at 731-3184 for additional information or appointments.

ACTU Web Page: http://weber.u.washington.edu/~actu/ ACTU Email: actu@u.washington.edu

study is giving AMD-3100 by continuous infusion for 10 days to each participant. (Participants are hospitalized for a total of 12 days for this study, and compensated for their time.)

The study is designed to first look at lower doses, and if these appear safe, to look at several higher doses. Four volunteers will receive each dose. The first group of patients has completed their dosing, and the second group will be starting soon. It is too soon to say anything about the results of this study, but we are excited to be performing a study that could, if successful, lead to a new strategy for the treatment of HIV.

Volunteers Wanted

Participants are being sought for this and several other studies. Screening tests, most study medications, and laboratory and clinical monitoring that are performed as part of our studies are free of charge for potential participants and study enrollees. The unit does not assume the role of primary care provider for study participants, but coordinates care with each patient's primary care provider. Physicians, their staff, or potential enrollees can call Karen Novak or Margot Perrin at 731-3184 for additional information or appointments.

❑ *Contributed by Ann Collier MD*

Pediatric AIDS Clinical Trials Unit Report: *"HIV and preganacy—where are we?"*

In 1994, zidovudine was shown to decrease the transmission rate of HIV from mothers to their newborns from 25% to 8%. Since that time, treatment of HIV infected women during pregnancy and labor and delivery and treatment of their newborns with zidovudine has been the standard of care. While powerful medications to treat HIV-infection have been licensed and available for the treatment of HIV infection in adults, little is known about the effect of these medications during pregnancy to either a woman or her unborn infant. Because pregnancy results in many physiologic changes to a woman, drugs are often metabolized differently and require different dosing regimens. Some medications may be concentrated in the amniotic fluid surrounding a fetus, while others may not even cross the placenta. The goal of several studies currently being done by the Pediatric AIDS Clinical Trials Group is to define how to best use antiretroviral medications during pregnancy.

Over the past year there have been several case reports of complications associated with the use of antiretroviral medications during pregnancy. One group reported an increased rate of premature birth and associated complications in women taking a class of antiretroviral medications called protease inhibitors during pregnancy. A group of French investigators reported several cases of rare mitochondrial disorders in infants born to women taking antiretroviral agents throughout pregnancy. (presented at 6th Conference on Retroviruses and Opportunistic Infections, Chicago, Illinois, 1999). These case reports prompted a very intensive look at the population of women and infants followed on treatment studies in this country. Preliminary analysis of several cohorts of antiretroviral exposed and HIV-1 uninfected infants followed by the AIDS Clinical Trials Group, Women-Infant Transmission Study and the CDC have not found either premature birth or evidence of metabolic complications. Of 14,883 uninfected infants and children born to HIV infected women treated with antiretroviral medications during pregnancy, there were no deaths that could be attributed to mitochondrial disorders (presented by K. McIntosh, ACTG Meeting, Washington DC, July 1999). Importantly, a relatively small percentage of the women in these cohorts took protease inhibitors during pregnancy.

Obstetricians are responsible for both the health of a woman and the health of her unborn infant, therefore information about the dosing, safety, toxicity, and long term effects of these medications to both the mother and the infant is crucial. Despite the commercial availability of many antiretroviral agents, studies of using these medications during pregnancy are limited at best. The Pediatric AIDS Clinical Trials Unit at Children's Hospital and

Regional Medical Center (CHRMC) and the University of Washington currently has several ongoing perinatal treatment trials, with the goal of identifying the best doses and drug regimens for pregnant women and resolving safety issues for the pregnant woman and her fetus. For more information, contact Dr. Jane Hitti or Deb Goldman ARNP at Northwest Family Center (206)731-3066 or Kathey Mohan ARNP at the Pediatric AIDS Clinical Trials Unit at CHRMC (206) 528-5020.

❑ *Contributed by Ann J. Melvin MD and Kathey Mohan ARNP*

Main Requirements	Study Drug or Topic	Study Overview
Pediatric Antiretrovirals:		
≥16 weeks antiretroviral therapy, ages 4 months-17 years	**d4T/evirapine/ritonavir vs. d4T/3TC/nelfinavir (TID) vs. d4T/nevirapine/nelfinavir (TID) vs.d4T/3TC/nevirapine/ nelfinavir** (ACTG 377) *(Closed to accrual)*	A Phase I/II randomized, multicenter protocol comparing four antiretroviral regimens containing combinations of protease inhibitors, NRTIs and an NNRTI in mildly symptomatic HIV-1-infected children aged 4 months to 17 years of age. The purpose of this study is to evaluate the ability of these regimens to delay disease progression.
Cohort 1: ≤ 16 years of age and able to swallow pills	**DMP-266** Nelfinavir (ACTG 382)	Phase I, open-label pharmacokinetic study of a new non-nucleoside reverse transcriptase inhibitor given once daily in combination with nelfinavir. Concomitant use of nucleoside reverse transcriptase inhibitors are required, but are not supplied through this protocol.
Cohort 2: ≥ 3 month to ≤ 8 years (suspension)	*Cohort 1 accrued Cohort 2 temporarily closed to accrual*	
Children aged 3-16 years of age and able to swallow capsules. Must be naïve to at least one of the following: stavudine, zidovudine, or ddI	**Saquinavir soft-gel plus 2 NRTI's of choice Vs. Saquinavir soft-gel plus nelfinavir plus one or two NRTI's of choice** (ACTG 397) *(Closed to accrual)*	This is a phase I study to evaluate the safety and tolerance of 2 saquinavir soft-gel containing treatment arms. Children must have a viral load >10,000 at entry to be eligible. Intensive pharmacokinetics will be obtained from a subset of children randomizing to the saquinavir soft-gel plus nelfinavir arm of the study. Because saquinavir soft gel is not available as a liquid formulation, children must be able to swallow capsules.
Infants aged 1-2 months with documented HIV infection	**Ritonavir Zidovudine Lamivudine** (ACTG 345)	The purpose of this Phase I study of ritonavir plus zidovudine and lamivudine is to determine the pharmacokinetics and dosing of ritonavir in very young children.
Perinatal Treatment Studies:		
Pregnant HIV-infected women	**Saquinavir-sgc Zidovudine Lamivudine (ACTG 386)**	This is a Phase I study of the safety and correct dose of saquinavir-sgc given in combination with zidovudine and lamivudine during pregnancy and labor and delivery. Women may begin therapy at 13 weeks gestation and continue until 6 weeks postpartum.
Pregnant HIV-infected women	**Nevirapine** (ACTG 316)	Pregnant women infected with HIV and who are naïve to nevirapine are eligible for this trial. During labor and delivery women will be given a single dose of nevirapine or placebo and their infants will receive a single dose of nevirapine between 48-72 hours of age. Women may continue on AZT or other antiretroviral medications, except for nevirapine during their pregnancy. The goal is to determine if nevirapine administered at delivery and to the newborn will further decrease maternal-fetal HIV transmission.
Pregnant HIV-infected women	**Zidovudine, lamivudine, ritonavir** (ACTG 354)	This Phase I study of the safety, tolerance and pharmacokinetics of ritonavir given with zidovudine and lamivudine to HIV-infected women and their newborns. Women are enrolled between 14-32 weeks gestation.
Newborn infants of HIV-infected women	**ALVAC-MN120TMG** (ACTG 326)	Phase I/II study of the safety and immunogenicity of ALVAC-MN120TMG vaccine given to infants born to HIV infected mothers. Infants receive the vaccine within 72 hours of birth, and at weeks 4, 8, and 12 of life. 18 infants receive vaccine; 6 receive placebo.

Opportunistic Infections:		
Asymptomatic or mildly symptomatic HIV-infected children aged 1-8 years	**Varivax (chickenpox vaccine)** (ACTG 265) *(Closed to accrual)*	Children who are aged 1-8 years with mildly symptomatic HIV disease who have never had chickenpox are eligible for this study vaccine. Mildly symptomatic HIV-infected children who have had chickenpox within 1 year of study entry are eligible as controls. The purpose is to find out if the licensed chickenpox vaccine is safe and works in children with HIV infection.
Infants born to HIV-infected women	**Measles Vaccine** (ACTG 225) *(Closed to accrual)*	Infants who are 6 months of age and born HIV-infected mothers are eligible for this study. Both HIV-infected and uninfected infants may participate. The purpose of the study is to protect young infants from infection with measles.
Natural History Studies:		
Infants of women who were enrolled in treatment trials during pregnancy; infants and children enrolled in any ACTG treatment or vaccine trial	**Observation** (ACTG 219)	Open to all infants and children currently or previously participating in HIV treatment protocols, including infants born to women who participated in a trial during pregnancy. The purpose of the study is to determine late effects of HIV therapies and HIV infection in children.
Infants born to HIV-infected women	**Increased calorie formula** (ACTG 247)	This is a randomized, double-blind, controlled study of an increased caloric density infant formula and its effect on growth and nutritional status of HIV-infected children. All infants born to HIV infected women are eligible for enrollment, however will be discontinued from the study if uninfected.
OPENING SOON:		
Pending Studies:		
HIV-Infected children and adolescents >2 years and <21 years receiving antiretroviral therapy as follows: >2ys <6 yrs CD4%>25% >6yrs<21 yrsCD4%>20%	**Observational-no treatment** (ACTG P1008)	This is an observational study of children who have demonstrated immune reconstitution with CD4 counts in a range which consistent with stopping opportunistic infection prophylaxis. This study will evaluate the safety of stopping OI prophylaxis medications. Hepatitis A vaccine will be given to measure how well the immune system is functioning.
Uninfectected, non-exposed children aged 0-18 years	**Observational, cross sectional study** (ACTG P1009)	This is an observational study of HIV-uninfected, non-exposed children who are healthy and coming to CHRMC for routine care or elective surgery. The purpose of this study is to obtain information about normal CD4 levels in children not infected or exposed to HIV.
HIV-infected children aged 4-17 years initiating open-label HAART	**No antiretrovirals Tetanus/hepatitis A vaccines** (ACTG P1006)	This is a randomized, comparative response study with long term follow up. The purpose of this study is to evaluate how well the immune system recovers after a child begins highly active antiretroviral therapy. Response to tetanus and hepatitis vaccines will be used to measure the immune systems function.
Pregnant HIV-infected women	**Zidovudine, lamivudine, nelfinavir** (ACTG 353)	This Phase I study of the safety, tolerance and pharmacokinetics of nelfinavir given with zidovudine and lamivudine to HIV-infected women and their newborns. Women are enrolled between 14-32 weeks gestation.
Pregnant HIV-infected women	**Zidovudine** (ACTG 324)	This is a Phase I study to evaluate the use of oral zidovudine given during labor and delivery in place of intravenous zidovudine.
Heavily pre-treated HIV-infected children aged 7-22 years	**Stavudine, didanosine, lamivudine, nevirapine, saquinavir-sgc, nelfinavir, ritonavir, hydroxyuria** (ACTG P 1007)	Phase I proof of concept trial to evaluate the safety and tolerance of a multidrug therapy administered at higher than standard doses for children with progressive HIV disease.

AIDS Vaccine Evaluation Unit Report

The University of Washington AIDS Vaccine Evaluation Unit (UW AVEU) will be enrolling volunteers for two new HIV vaccine studies this summer and fall. Protocol 032 is a Phase I trial with a new vaccine product, HIV-1 SF-2 recombinant p24 subunit vaccine, in combination with ALVAC vCP205, a canarypox vaccine with which we have several years of experience. This safety study will enroll 64 volunteers nationally for 18 months of participation. Protocol 034 is another study reopening soon. This Phase I, one-year study extension will compare two different canarypox vaccines, ALVAC vCP205 and ALVAC vCP 1452. Protocol 203, outlined in last quarter's report, has been postponed pending further Protocol 034 data. Four other studies are continuing in follow-up.

As of June 1999, the UW AVEU has enrolled a total of 682 volunteers, and follows 107 actively. Current vaccine studies focus on the safety of HIV-1 experimental vaccines and the quality of the immune response to the vaccines. The safety and tolerability of the study vaccines thus far has continues to be very good. It is possible that current studies may identify vaccines that would be appropriate for a test-of-concept trial targeted for the year 2000 which would involve several thousand volunteers.

New vaccine strategies continue in development. Recent studies suggest that the DNA vaccine may work synergistically with canarypox HIV vaccines in animals to produce a strong immune response—this will be evaluated in an extension of Protocol 031, in which volunteers who have already received the DNA vaccine will receive canarypox ALVAC vCP205 vaccine. A lot of enthusiasm also surrounds the work of Jack Nunberg, from the University of Montana, who visited the Fred Hutchinson Cancer Research Center recently and gave an overview of his work on CD4-*gp*120 interactions which may be the basis for a novel vaccine strategy in the future.

HIV Vaccine Awareness Day

On May 18, 1999, HIV Vaccine Awareness Day, we held a formal media event to coordinate with events being held at other vaccine study sites nationally. The event was a collaborative effort between the AVEU and the HIV Network for Prevention Trials (HIVNET), held at the Center for Health Education Research in central Seattle. Around 50 people attended. Drs. Lawrence Corey and Connie Celum, investigators leading the Seattle AVEU and HIVNET sites, respectively, spoke about the progress over the past eleven years of the HIV vaccine effort in Seattle. Both made special mention of the almost 800 volunteers who have enrolled in HIV vaccine studies to date in the Seattle area.

Representatives from the offices of Senator Patty Murray and the Northwest AIDS Foundation read statements of support for HIV vaccine research. A Proclamation was presented by Greg Nickels of the Metropolitan King County Council, and another was received from the Mayor. Local representatives from the offices of Congressman Jay Inslee, the William H. Gates Foundation, and various AIDS service organizations attended. Approximately ten HIV vaccine volunteers were on hand to represent the Seattle AVEU and HIVNET volunteers and to provide the media with an opportunity for interviews. All vaccine volunteers received a letter of appreciation.

Community Advisory Board (CAB)

The role of the Community Advisory Board is to provide community input in guiding the vaccine trial process, through protocol review, policy review, community education and oversight of recruitment strategies. The AVEU CAB meets monthly in joint meetings with the HIVNET CAB, a collaboration in place since fall 1998. With the possibility of the HIV vaccine research effort in Seattle becoming more

consolidated during the next grant cycle, the joint CAB meetings will continue, though the CABs also maintain separate identities.

The joint CAB members had a four-hour training session on March 6 to familiarize them with basic vaccine and immunology principles, active protocols, and local HIV epidemiology and prevention studies. The AVEU sent two CAB representatives to the national AVEG meeting in Reston, Virginia, May 6-7. The agenda included a transition to joint HIVNET and AVEU CAB meetings on a national level.

From Group to Network

The structure of the AIDS Vaccine Evaluation Group and its partners may change in the near future. The leadership and administration of HIV vaccine trials is expected to shift away from the National Institues of Health (NIH) to a Vaccine Trials Network with responsibilities for conducting Phase I, II and III HIV vaccine trials in international as well as domestic sites. The University of Washington expects to play a major role in the network leadership, statistics, and immunology laboratory components.

Other Studies at the AVEU

Other studies with openings for volunteers include a study of individuals with repeated exposures to HIV who remain HIV-seronegative. Volunteers are intensively studied immunologically to determine what factors may be important in evading HIV infection. Prospective volunteers may be referred to Jean Lee, (206)667-2398.

❑ *Contributed by Marnie Elizaga MD*

AIDS Vaccine Evaluation Unit

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Volunteers Needed

Must be 18-60 years of age, healthy, HIV-negative, and available for 18 months to two years.
Please call (206)667-2300 for more information.